

A. Project Title and Project Purpose Statement**Project Title:** Growing Healthy-er: Taking Lessons from the School Yard to the Back Yard

Purpose Statement: The purpose of the Growing Healthy-er: Taking Lessons from the School Yard to the Back Yard project (referred to from here forward as “the project”) is to expand the reach of CSU’s successful school-based Growing Healthy program to have a greater impact on families in South Central Los Angeles. The Growing Healthy program promotes healthy eating, reduces exposure to toxins, and teaches strategies for mitigating and adapting to climate change through garden-based environmental justice education. The program teaches about environmental and social justice issues impacting the local food system as well as how to grow food using natural methods as a strategy to increase access to healthy fresh produce, raise awareness about lead and pesticide hazards, and reduce exposure to these hazards. Growing Healthy is currently offered to school-aged children through in the classroom and after-school programs. Through the proposed *Growing Healthy-er* project the program will be expanded to offer training to parents and guardians of students at Normandie Avenue Elementary School in order to support increasing adoption of new practices at home, thereby expanding the impact of the program from the “school yard” to students’/families’ “back yards”.

There is a growing interest in urban agriculture and home gardening and the many benefits that it offers individuals and communities, from creating jobs to cooling the temperature to reducing home food costs to increasing access to high quality produce. However, because our community is heavily contaminated with toxins, such as lead in the soil, it is important that proper methods are used to ensure that food that is grown is healthy and safe. Many residents are not aware of the risks, proper uses, or alternatives to chemical fertilizers and pesticides. The project will teach residents about the health, environmental, and economic benefits of urban agriculture and home food production; about the health risks posed by lead contaminated soil and pesticide use; and farming/gardening techniques that reduce exposure to these risks. As a result youth and adults will be empowered with information and skills to improve the quality of their home and community environments while growing food to improve their physical health.

Related Environmental Statutes:

- Toxic Substances Control Act, Section 10(a): conduct research, development, monitoring, public education, training, demonstration projects, and studies on toxic substances; and,
- Federal Insecticide, Fungicide, and Rodenticide Act, Section 20(a): conduct research, development, monitoring, public education, training, demonstration projects, and studies on pesticides.

B. Environmental, Public Health and Community Climate Resiliency Information

The project will take place in South Central Los Angeles, where Community Services Unlimited Inc. has been organizing with residents to address community issues for over 30 years. South Central Los Angeles (SCLA) is 67.7% Mexican/Central American, 28.5% African American, 2% white, and 1.7% Asian/PI/Native American/Other¹

¹ All demographic and health statistics are from the *Los Angeles County Department of Public Health. Key Indicators of Health by Service Planning Area Report*, published March 2013, unless otherwise cited.

Our community suffers from significant environmental, social and economic inequities that negatively impact the health and well being of residents. SCLA has the highest rate of poverty in the county, 31.1% of households live at or below the federal poverty level. The unemployment rate is the second highest (15.5%). Only 68% of children ages 1-17 years in South Central Los Angeles can easily get to a park, playground, or other safe place to play, compared to 91.6% in west LA (the wealthiest and healthiest part of the county).

Our community's food environment and the resulting health outcomes, reflect a significant environmental justice problem. Our community is over run with junk and fast foods (low nutrition/high calorie). In 2004 Community Services Unlimited partnered with other community agencies and residents to carry out a community food assessment to better understand our local food environment. The ACTION (Active Community to Improve Our Nutrition) assessment found 50 fast food restaurants and 39 corner stores in the 1x1.5 miles area that was surveyed. Research by the University of Southern California found that the few full service grocery stores that are located in SCLA sell healthier foods at higher prices and lower quality produce than markets in neighboring wealthier communities. Only 77.9% of adults surveyed by the DPH reported that it was easy to get fresh fruits and vegetables, in every other part of the county at least 89% of adults reported easy access to fresh fruits and vegetables. Only 11.4% of adults surveyed consume 5+ servings of fruits and vegetables a day, also the lowest in the county. As a result of the combined impact of poverty and limited access to healthy foods, residents of SCLA have the second highest rates of obesity among adults in Los Angeles County (32.7%) and the highest rate of obesity in children (29.0% of children surveyed in grades 5, 7 and 9). 10.1% of adults in South Central have been diagnosed with diabetes and 28.4% have been diagnosed with hypertension. SCLA residents are nearly 4 times more likely to die from diabetes than those living in West L.A., the wealthiest area of the city.

SCLA is the most densely populated area of the city. It is heavily developed and paved, and much of the infrastructure, including houses and apartment buildings, are aging and poorly maintained. It is crisscrossed by broad and heavily trafficked boulevards, is bordered by two major freeways, and is situated under the approach path for airplanes landing at Los Angeles International Airport. The community, and most notably for this project, our soil, is heavily contaminated with lead, largely from the improper removal or containment of lead-based paint, and pollution left behind by now illegal lead-based fuels. As a result South Los Angeles has the highest number of reported cases of lead poisoning in Los Angeles County²

Our community is also vulnerable to many challenges associated with climate change. Amidst the heavily concreted streets and neighborhoods there is very little green space, few street trees, or parks, even the schoolyards are mostly pavement. The lack of vegetation causes a heat island effect, causing Los Angeles to be 6-8 degrees warmer than near by rural areas³. According to the

² Los Angeles County, Department of Public Health, Childhood Lead Poisoning Prevention Program Response and Surveillance System for Childhood Lead Exposures (RASSCLE) Legacy.

³ U.S. Environmental Protection Agency, Heat Island Effect website. Accessed on January 6, 2015. <http://www.epa.gov/heatisland/index.htm> and L.A. Island. Report on the heat island effects in Los Angeles by the Heat Island Group consulting firm website. Accessed on January 6, 2015. <http://heatisland.lbl.gov/LEARN/>

U.S. Environmental Protection Agency (EPA), “Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water quality.” As temperatures continue to rise, poor, low and moderate-income residents will be most impacted by rising energy costs and the impacts of heat-related illnesses. Similarly, climate change is already and will continue to have dramatic impacts on global agriculture⁴, which will continue to drive up food prices. Food prices have increased dramatically in recent years and will continue to rise with further impacts from climate change. Residents in our community already face hunger and barriers to eating healthy, and suffer from many related health consequences. Rising food prices will only make matters worse.

C. Organization’s Historical Connection to the Affected Community

Community Services Unlimited Inc. (CSU) is a community-based organization established in 1977 and headquartered in South Central Los Angeles, that works with residents to address the inequalities and systemic barriers that make healthy and self-reliant life-styles unattainable in our community. For more than 33 years CSU has been operating programs to support the health and well being of our community. Early efforts included free medical screening programs, a free breakfast program for children, and free food give-a-ways for residents in need. Today we use food as a tool to educate, empower and rebuild our community through our youth education programs as well as through our *Village Market Place* program.

Establishing urban farms and expanding home food production. CSU has partnered with Normandie Avenue Elementary and other neighborhood schools, to install school mini-farms that include gardens and fruit tree orchards. In 2005 CSU partnered with the EXPO Center to turn an empty lot slated to become a parking lot into an urban farm. At these locations CSU has trained hundreds of community residents in safe and healthy home food production that build soil fertility through composting and mulching, conserve water and do not rely on chemicals.

Established youth training and education programs that promote healthy eating, engage young people in environmental change and provide meaningful jobs. Through CSU’s *Growing Healthy Program* (GH) nearly 200 elementary and middle school students have participated in nutrition, environmental, and food system education while caring for their schools’ mini-farms. More than 120 low-income at-risk youth ages 14–23 (roughly, but not limited to) have participated in CSU’s *From the Ground Up Youth Training Program* (FGU), an internship and apprenticeship program that trains youth in environmental awareness, urban farming, entrepreneurship, leadership development, and job and life skills. A goal of our youth training programs is to cultivate leadership within our community. Three former FGU interns have become CSU staff. The programs educate and inspire young people to make healthy choices and contribute to the greening and rebuilding of their community. Youth in both programs carryout organizing and education projects to pass on what they have learned and to improve the community. Youth have run school farm stands, presented at conferences, led

⁴ U.S. EPA. Climate Change – Health and Environmental Effects, Agriculture and Food Supply. Accessed on January 8, 2015 <http://www.epa.gov/climatechange/effects/agriculture.html>

community trainings focused on health and environment issues, and advocated for neighborhood corner stores to sell healthier foods.

Increased access to fresh, local, beyond organic produce for residents at an affordable price: Under the *Village Market Place* (VMP) CSU distributes produce from our urban farms and from southern California small farmers through a weekly farm stand, a produce bag subscription program, and wholesale distribution to local restaurants and markets. In 2014 CSU sold approximately 85,000 lbs. of produce, this included over 8,000 individual transactions through our weekly farm stands and produce bag subscription programs, not counting wholesale sales to restaurants and other local businesses or special events. Youth in the FGU program participate in developing and carrying out the program.

Every aspect of CSU's work is developed and carried out with significant community involvement and partnerships. We gather feedback and input from youth and adults who participate in our programs and from our partner schools and community agencies through regular survey's, focus groups and one-on-one interviews. We also host community dinners 4 – 6 times a year where our staff and youth report on our work and gather input and involvement from residents.

D. Project Description

Project Goals:

- 1) Increase understanding of environmental pollution, food system, and climate change issues;
- 2) Reduce exposure to lead and toxins in pesticides through urban agriculture/gardening;
- 3) Increase access to healthy and fresh food among low and moderate income residents, especially families with school aged children; and
- 4) Build capacity among community residents to mitigate and adapt to the impacts of climate change by promoting and supporting home-based food production that reduces food and energy costs.

Description of Project Activities/Methods:

CSU will expand the delivery of the Growing Healthy program to include an education program for parents and guardians aimed at bringing the lessons from the schoolyard home for families of Normandie Avenue Elementary School. The Growing Healthy curriculum covers the following topics:

- The source and risks associated with lead contamination in soil; and remediation strategies;
- The dangers of pesticide use to human health and the environment and alternatives to pesticide use;
- The science and benefits of natural farming/gardening methods (such as composting, crop rotation, companion planting, and mulching);
- Understanding climate change and its connection to agriculture;
- How will climate change impact our community and strategies for mitigating and adapting to climate change on the local level;
- Environmental justice and health issues related to access to healthy food; and

- Health benefits of eating fruits and vegetables and basic preparation skills.

The existing Growing Healthy curriculum is aimed at elementary and middle school students; tied to state education standards; and uses hands-on activities, research, and dialogue to engage students in learning. Students in the growing healthy program learn while caring for their school garden and fruit tree orchard. Each session is comprised of two components, garden-based environmental education related to the above topics; and nutrition education focused on fruits and vegetables grown in the garden. Through the Growing Healthy-er project CSU will modify the curriculum and activities as necessary to be appropriate for an adult audience. Like their children, parents and guardians attending Growing Healthy workshops will learn how to produce food at home using sustainable methods, and then learn simple culturally appropriate preparation techniques so they can make these foods part of their diet. The Growing Healthy/Growing Healthy-er curriculum uses culture-centered instruction to generate interest among the ethnically and culturally diverse families in our community. Gardening and cooking lessons feature foods that are significant to the cultures represented in our community. Students and their parents and guardians will learn about the traditional farming methods their ancestors used to grow these foods; how these practices have changed over time; and how a return to many of these traditional methods can reduce the need for using chemical pesticides and fertilizers.

The Growing Healthy program will be delivered to parents and guardians through a series of six 1-2 hour workshops offered during the school year in the Normandie Avenue elementary Parent Center. The program will reach approximately 30 adults, many of whom are active volunteers in the Parent Center and members of the PTA and will attend multiple sessions, resulting in in-depth and broad learning about the topics and skills covered in the program curriculum. Participants in the workshop will receive gardening and cooking supplies used in the class (such as seeds, plants and produce used in recipes) to take home, allowing them to put their new knowledge to immediate use. Our experience and research has shown that the sooner participants are able to implement what they learn at home, the more likely they are to adopt new practices in the garden and kitchen for the long-term.

The program will also continue to be delivered to students in the classroom and as part of an after-school program. The program will be delivered to four classes of approximately 30 students each, and to an after school program of approximately 15 students during the 2015/2016 school year and reach approximately 150 students (one 8-week session delivered to two classes, and one 8-week after-school program offered each semester). CSU staff will meet with classes/after school groups one time a week for approximately 1-hour.

Based on the skills and information they gain in the program, adults and youth will participate in activities to share information they have learned with other Normandie Avenue elementary school students and families, and others in the community through the following activities:

- 1) **Present information at school events and to other classes.** Students will present information to other students, teachers, administrators, and to their parents/families through small group presentations to other classes/clubs and posters/billboards on campus. Youth and adults will work together to have information tables at school events (such as back to school night, school health and culture fairs, and similar types of events). By sharing in this

way students and families will deepen their understanding of the information they are learning. They will also distribute handouts from CSU on safe and healthy home gardening and the benefits of local and sustainability produce; promote the availability of produce from their school mini-farms through CSU's *Village Market Place* program; and promote volunteer opportunities and workshops at CSU's urban mini-farms.

- 2) **Host volunteer events for the community in their school mini-farm.** CSU/Normandie will host 3 volunteer events during the year. Volunteers will include students from the school, parents, teachers, local high school and college students, and other community residents. Students and adults who participate in the Growing Healthy program will assist CSU staff in designing and leading the volunteer events where participants will learn how to plant, weed, mulch, and other gardening skills helping to care for and expand productivity of the Normandie Avenue elementary school mini-farm and fruit tree orchard. The events will also include a cooking/nutrition education presentation.

Relation to Environmental Statutes Identified in Threshold Eligibility Form:

The project will educate South Los Angeles residents about health threats related to lead exposure and the use of pesticides. We will test the soil in the school garden and fruit tree orchard for lead contamination, and provide education and training on strategies to reduce exposure and remediate lead contaminated soil. It will educate participants about pesticides and teach them natural gardening methods that reduce pesticide use. These relate to the following two environmental statutes: the Toxic Substances Control Act, Section 10(a); and the Federal Insecticide, Fungicide, and Rodenticide Act, Section 20(a).

Project Timeline:

Activity	1 st Q ⁵	2 nd Q	3 rd Q	4 th Q
Review and modify garden-based environmental justice curriculum	X			
One 8-week session presented to four different classes at Normandie Avenue Elementary School (two classes during each semester).	X	X	X	X
Two 8-week after school programs presented at Normandie Avenue Elementary School (one session during each semester).	X	X	X	X
Three community volunteer events hosted at Normandie Avenue Elementary School.	X	X	X	X
Soil test conducted in the school garden and fruit tree orchard at each school site. Results used by students & families to learn about how to build healthy soil and address contamination.	X		X	
Students & parents/guardians share information on safe and healthy gardening through presentations and events.	X	X	X	X
Carry out evaluation of project impact and outcomes		X		X

⁵ Q = Quarter. Oct – Dec 2015: 1st Quarter; Jan – March 2016: 2nd Quarter; April – June 2016: 3rd Quarter; July – Sept 2016: 4th Quarter.

Project Partners:

CSU relies on support from a wide variety of partners in order to deliver our programs. The following is a list of the primary partners for this project. These partnerships have been developed over many years through identifying shared goals and opportunities to leverage expertise and resources in order to have more significant community impact. The partnerships are maintained and sustained through regular communication and joint planning.

Normandie Avenue Elementary School: Partners since 2003, the school served as research and survey sites during the ACTION assessment. CSU has developed the school garden and fruit tree orchard and implemented garden-based education programs for more than a decade. CSU will work with administrators and teachers to identify the classes where the project will be delivered, create a workshop schedule with the parent center, and identify school events and other opportunities for students and families to share what they are learning with other students, parents, and the broader community. The school will host volunteer events and assist with doing outreach to the school and broader community to encourage participation. This mutually beneficial partnership supports CSU's goals to educate and empower youth and their families to be able to make healthy choices and participate in building a healthy community. It also allows the schools to offer experiential garden-based instruction to their students across a wide variety of subject areas.

County of Los Angeles Childhood Lead Poisoning Prevention Program: Provides outreach and education across LA county, promotes screening, monitors and does management for lead-burdened children. The program will provide free educational materials and guest speakers on lead poisoning risks and safety practices, and will assist CSU in testing garden soil through the County Public Health Laboratory. Our education and training program will assist the program in reaching vulnerable children in South Central Los Angeles.

Los Angeles Conservation Corps (LACC): The LACC offers construction and maintenance support to conservation and community greening efforts across Los Angeles County, including school gardens. They also offer free after school programs at Los Angeles Unified School District Schools, including Normandie Avenue Elementary School, where nearly 100 students participate. CSU will partner with LACC to deliver the after school portion of the program. Through partnering with CSU, LACC is able to offer high quality after school programming in the school garden that they otherwise would not have the capacity to offer.

Project Evaluation: The Growing Healthy-er: Taking Lessons from the School Yard to the Back Yard project will educate approximately 30 adults/families and 150 local youth directly through participation in the program. The program will reach approximately 500 additional residents (youth and adults) through presentations and tabling at school events, volunteer events. Through the program youth and their families will: be more knowledgeable about environmental justice and food system issues, and about the health risks posed by lead and pesticides and how to protect themselves and have increased capacity to eat healthy and mitigate and adapt to climate change through participation in urban agriculture and home gardening. Participants in the program will have gained knowledge and strengthened their ability to think critically about health and environmental issues.

Program impact and evaluation will take place through pre- and post-tests that are administered to program participants. Tests will measure what new information and skills they have learned and how this knowledge has/will impact their lives and practices at home. Pre- and post-tests will be administered through written surveys, and group and individual discussions. Tracking tools will also be used to monitor quantitative program records, such as the number of participants, the number of sessions each person participates in, the number of residents reached through presentations and tabling and the number of volunteers engaged.

E. Organizational Capacity and Programmatic Capability

Community Services Unlimited has extensive experience and a successful track record developing, implementing and managing programs and projects. Program delivery and administration is carried out by CSU's 12 staff members, with management and oversight from CSU's executive director and board of directors. The proposed project will be carried out in coordination with existing programs that have dedicated and trained staff, existing infrastructure and funding, and established partnerships, which will ensure its success. CSU uses QuickBooks for our in-house accounting, which allows us to manage, expend, and account for all organizational funds, and generate detailed reports. We use detailed timesheets that allow us to bill staff time to specific programs and projects as appropriate. We also work with an outside accounting and financial services company that prepares quarterly financial reports, tax reporting, manages payroll, and advises and assists us in developing in-house accounting procedures. With these structures in place we are able to successfully manage the multiple contracts and grants that make up our approximately \$460,000 annual budget and meet all financial reporting guidelines and requirements of our funders. Upon receiving funding for this proposed project we will create the internal QuickBooks sub accounts, and other accounting tools necessary to manage our award in accordance with EPA requirements.

Over the last five years CSU has managed multiple contracts that are similar in size, scope, and objectives, CSU has successfully met all financial and progress reporting requirements, submitting monthly, quarterly and final reports as required and reimbursement requests in a timely manner. CSU regularly exceeds the contracts projected outcomes and outputs while staying within our budget.

CSU was the recipient of an Environmental Justice Small Grant in 2011. We have submitted our progress report on activities and budget expenditures on time. The agreement number is #EQ00T77501 and our program officer is Carlin Hafiz.

F. Qualifications of the Principal Investigator or Project Manager (PI/PM)

Neelam Sharma, CSU's executive director will be the PI/PM for this project. Sharma has worked with CSU since 2000. She has been doing grassroots community organizing on health and justice issues for over 2 decades (see PI resume) and is deeply committed to building youth leadership in the community on issues of health, sustainability and the environment. She was the lead organizer behind the ACTION assessment, recruiting and engaging dozens of community partners, and mentoring volunteers and interns to carryout the assessment. Sharma has been responsible for the development of CSU's food justice education and training programs. She

initially developed program content and delivered programs, and has since recruited and trained staff to deliver programs. She has extensive knowledge and experience in urban agriculture and small-scale food production and is responsible for developing CSU's 3 urban farm sites and training staff and volunteers in natural and sustainable food production methods. She has successfully managed and grown CSU budget over the last 10 years, taking CSU from a volunteer organization with no funding, to 12 staff and an annual budget nearly \$500,000.

Ms. Sharma has raised two children in South Central Los Angeles who attended neighborhood schools. She was a founding member of the Healthy School Food Coalition, the parents' coalition responsible for passing soda ban in the Los Angeles Unified School District, the first in the country. Neelam is also involved with many local and state policy coalitions. She represented CSU as a founding member, the Los Angeles Food Justice Network and the California Food and Justice Coalition (CFJC).

Sharma has been a voice calling for the diversification of the food justice movement and for this work to be understood as a critical element of working for social and environmental justice. As a result of her experience and success working and organizing with residents to expand urban agriculture and improve community health, she is regularly invited to provide training to other community-based organizations on community organizing, youth empowerment, and food justice issues. She was a keynote speaker at the 2009 Kellogg Food and Society Conference.

G. Past Performance in Reporting on Outputs and Outcomes

- 1) From the Ground Up. \$975,000/3 yrs (FY14-16). Nutrition Education Obesity Prevention (NEOP). LA County Dept. of Public Health. #PH-002548. Sara Sierra 213-351-7842.
- 2) Village Market Place. \$170,859 (FY12-14). U.S. Dept. of Health & Human Services Community Economic Development Grant Program. #90EE0960. Britney Yannayon 202-401-5680.
- 3) Growing Healthy: Reducing Exposure to Toxins in Our Community. \$24,998 (2011). EPA Environmental Justice Small Grants Program. #EQ00T77501 Anna Woods 702-798-2496
- 4) Garden Gateway. \$27,785 (2014/2015). University of Southern California, Neighborhood Outreach Grant. #11488 Carolina Castillo 213-740-6880.
- 5) Cal Fresh Outreach. \$42,749 (2014/2015). Contract #10-3055. CA Association of Food Banks. Stephanie Nishio 510-350-9905

Community Services Unlimited has extensive experience and a successful track record reporting on outputs and outcomes. Executive director, Neelam Sharma, has worked with consultants and staff to develop tools and processes for tracking both program outputs and outcomes, including logic models to detail projected outcomes and outputs, pre and post-tests and other survey tools for gathering qualitative data, and database tools for tracking quantitative data. CSU uses collected data to generate both quarterly and final reports for funders and annual reports for the general public. Program evaluation and reports of past grants demonstrate success in achieving program impact, and demonstrate that we regularly exceed outcomes. The final evaluation of our Growing Healthy project funded by the Network for a Healthy California showed that we exceeded goals regarding number of students reached, number of nutrition lessons delivered, and number of gardens planted and pounds of food grown. The evaluation shows that all goals

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Submitted by: Community Services Unlimited, Inc.

regarding student impact (new information learned, new habits formed, and new healthy foods tried) were also reached and in fact exceeded.

H. Quality Assurance Project Plan (QAPP) Information

As part of our project we will do soil testing on the school garden and fruit tree orchard. The soil tests will be conducted by the Los Angeles County Health Department and data generated will be used to teach students and their families about soil contamination and remediation strategies.